

Our Reference: GP-302837-OST-ALS

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant:	Walter A. Dorfstatter
Serial Number:	10/715,633
Filing Date:	November 18, 2003
Confirmation No.:	4329
Examiner/Group Art Unit:	Robert A. Sorey/3626
Title:	METHOD AND SYSTEM OF ESTIMATING VEHICLE DAMAGE

**REPLY BRIEF**

Mail Stop Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Please enter the following Reply Brief in response to the Examiner's answer dated April 13, 2010 and the amended Examiner's Answer dated April 22, 2010.

Since June 13, 2010 fell on a weekend, it is submitted that this reply brief is being timely filed.

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I. STATUS OF CLAIMS

Claims 1-7 are the claims on appeal.

Claims 1-7 are rejected.

## II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellant requests review of the following grounds of rejection on appeal:

- 1) Whether claims 1-4 include nonstatutory subject matter, thereby failing to comply with the requirements of 35 U.S.C. § 101.
- 2) Whether claims 1, 2, and 5 fail to comply with the enablement requirement under 35 U.S.C. § 112, first paragraph.
- 3) Whether claims 1, 2, and 5 fail to point out and distinctly claim the subject matter that Appellant regards as the invention, as is required under 35 U.S.C. § 112, second paragraph.
- 4) Whether claim 1 is unpatentable under 35 U.S.C. § 103(a) over Mackey (U.S. Patent No. 6, 141,611, referred to herein as “Mackey”) in view of Lockwood (U.S. Patent No. 6,694,234, referred to herein as “Lockwood”).
- 5) Whether claims 2-4 are unpatentable under 35 U.S.C. § 103(a) over Mackey in view of Lockwood, and further in view of Madill (U.S. Patent Publication No. 2005/0108063, referred to herein as “Madill”) and Applicant Admitted Prior Art.
- 6) Whether claim 5 is unpatentable under 35 U.S.C. § 103(a) over Mackey in view of Lockwood.
- 7) Whether claims 6 and 7 are unpatentable under 35 U.S.C. § 103(a) over Mackey in view of Lockwood, and further in view of Madill.

### III. ARGUMENTS

The arguments presented hereinbelow address the Examiner's arguments presented in the Examiner's Answer dated April 13, 2010 and the amendment to the Answer dated April 22, 2010. It is submitted, however, that the absence of a reply to a specific rejection, issue, comment, or argument in the Answer does not signify agreement with or concession of that rejection, issue, comment, or argument. Finally, nothing in the following arguments of this reply brief should be construed as an intent to concede any issue with regard to any claim, except as specifically stated below.

#### **A. Rejection of claims 1-4 under 35 U.S.C. § 101**

##### **a. The term "on-board module" recited in claims 1 and 2**

At the outset, Appellant reiterates herein all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, in the Answer dated April 13, 2010, the Examiner applies the broadest interpretation of the term "module" because, according to the Examiner, Appellant's specification provides no guidance as to the meaning of the term. As stated in the Appeal Brief, Appellant recognizes that his specification provides no explicit definition of the term "module", and thus the plain meaning of the term should be applied. Appellant points out, however, that claims are to be given their broadest *reasonable* interpretation that is *consistent with the specification* (see MPEP § 2111). Appellant directs the Board's attention to page 2, lines 24-26 of his application as filed, which states, "... the example system includes a vehicle 10 with an on-board module 40 ***capable of sensing a vehicle incident such as a vehicle impact to object 12***" (emphasis added). Appellant submits that the module must include more than just software if it is capable of ***sensing*** a vehicle incident. It is submitted that since the module is capable of sensing a vehicle incident, the module includes a detector, sensor, or other similar hardware *in addition to* software.

Further, the Examiner argues that space modules are not similar to the on-board module recited in claims 1 and 2, and submits that Appellant's specification provides no support for this statement. Appellant submits, however, that the space modules were used in the Appeal Brief as

*an example* of similar modules. This example was used, in the Appeal Brief, as a way of illustrating that a module, in terms of its plain meaning, is more than just software.

Additionally, the Examiner argues that software, in and of itself, is capable of performing sensing, recording, and receiving functions (such as those recited in claims 1 and 2). Appellant disagrees with the Examiner, and submits that although software may be involved in the sensing, recording, and receiving (e.g., to initiate the recording function in response to recognizing that a vehicle incident has occurred), the software itself does *not* actually perform these functions. In fact, the software cannot process any information pertaining to a vehicle incident until one or more sensors actually detect a vehicle impact (such as, e.g., the vehicle crashing into a wall). Sensors often include magnetic components and/or electrical components that are involved in the sensing, and thus it is submitted that the Examiner's broadest interpretation of module is not reasonable.

**b. The term "transceiver" recited in claims 1 and 2**

Appellant reiterates herein all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, in the Answer dated April 13, 2010, the Examiner argues that the method step of transceiving (which Appellant construes as being the step of sending via the transceiver, as recited in claims 1 and 2) is distinct from the step that includes Appellant's mental process of estimating vehicle damage. Appellant respectfully disagrees with the Examiner, and submits that the process of estimating vehicle damage cannot be accomplished without the vehicle incident data. Given the fact that the method defined in claims 1 and 2 is directed to a method of estimating vehicle damage, and that the method step of automatically sending via the transceiver is part of that method, Appellant submits that the sending data via the transceiver is clearly part of estimating the vehicle damage. As noted above, without the data, nothing can be estimated.

**c. The term "estimator" recited in claims 1 and 2**

Appellant reiterates all of his arguments set forth in the Appeal Brief dated January 20, 2010.

Additionally, the Examiner still submits that the term “estimator”, as recited in claims 1 and 2, could reasonably be a person working at a computer. As an example, the Examiner asserts that an estimator (in insurance) is normally a person who estimates with or without a computer. Appellant submits, however, that what normally occurs is i) considered to be relative, and ii) not what is disclosed in Appellant’s specification. Although claims may be interpreted by the plain meaning of the words when a definition is not provided in the specification, it is submitted that what an insurance process *normally* involves is not the plain meaning of the term “estimator”. Yet further, the plain meaning of the term “estimator” should not even be applied in the instant case, at least in part, because the term “estimator” is already explicitly defined in Appellant’s specification (i.e., “a computerized process that receives the data from the module 40, either in the form of recorded data or computed delta velocity, and utilizes this data along with the vehicle type information to determine an estimated damage value” (page 4, lines 3-6)). Appellant submits that a computerized process infers that the device includes a processor capable of executing software programs for receiving data and for estimating the vehicle damage.

Further, the Examiner asserts that Appellant argued that estimating vehicle damage is a mental process, and thus conflicts with the argument that the estimating is accomplished via a computerized process. Appellant submits, however, that the Examiner is misunderstanding the teachings of the Federal Circuit in the *In re Comiskey* opinion (499 F.3d 1365 (Fed. Cir. 2007)), and is therefore taking the Appellant’s argument out of context. To reiterate from *In re Comiskey*, the Federal Circuit stated that “[w]hen an unpatentable mental process is *combined with a machine*, the combination may produce patentable subject matter...” (emphasis added; *In re Comiskey* at 1380). Appellant does not acquiesce to the Examiner’s assertion that estimating vehicle damage is purely a mental process. However, assuming *arguendo* that estimating (when not combined with a machine) is or involves (to some extent) a mental process, ***the fact that*** the estimating of the Appellant’s claims is accomplished using a computerized process (see again page 4, lines 3-6 of Appellant’s application as filed) renders the subject matter of the claims patentable. In other words, following *In re Comiskey*, the combination of the machine and the estimating produces patentable subject matter.

Even further, the Examiner disagrees that a computerized process is the same as a computer or a processor. The Examiner argues, as an example, that a computerized process may

refer to a process *determined by a computer* or entered into a computer; but not the computer itself. Appellant disagrees with the Examiner's argument, and submits that a process that is "determined by a computer" (as explicitly stated by the Examiner) means that the process is determined via software resident on the computer, and the computer executes or runs this software. Thus, without a computer, the software cannot perform the process. As such, a computerized process clearly is or at least involves a computer.

**d. The term "insurance service management system" recited in claims 1 and 2**

Appellant herein reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

**B. Rejection of claims 1, 2, and 5 under 35 U.S.C. § 112, first paragraph**

**a. Breadth of the claims**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Furthermore, in the Answer dated April 13, 2010, the Examiner also asserts that Appellant's claim 1 recites that the only things required to determine the vehicle damage value is delta velocity. Appellant respectfully disagrees with the Examiner, and directs the Examiner's (and the Board's) attention to claims 1 and 2 that are both directed to a method (and claim 5 is directed to a system) for estimating vehicle damage *comprising* the various steps recited in these respective claims. Appellant submits that the term "comprising" is an open-ended transitional term, and does not exclude additional, unrecited elements or method steps of the claims (see MPEP § 2111.03). It is submitted that the method defined in claims 1 and 2 may include additional steps, and the system defined in claim 5 may include additional elements since the transitional term "comprising" was used in all of these claims. Furthermore, claims 1, 2, and 5 recite no language that explicitly excludes other things than delta velocity when determining the vehicle damage. It is respectfully submitted that it would therefore be improper to state that the *only* things required to determine vehicle damage is delta velocity.

The Examiner further states that the estimating of the vehicle damage is similar to a black box calculation, where very little information goes in and an answer comes out without knowing



how that answer is arrived at. Appellant disagrees with the Examiner, and submits that Appellant's specification states that the vehicle damage may be estimated using a lookup table. As one skilled in the art is aware, lookup tables require no arithmetic calculations when determining the outcome, and thus the skilled artisan does not need to know how the answer is arrived at.

**b. Nature of the Invention**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Furthermore, the Examiner argues, in the Answer dated April 13, 2010, that Appellant's arguments set forth in the Appeal Brief dated January 20, 2010 fail to refute the Examiner's allegation that estimating vehicle damage using delta velocity is technically complex.

The Appellant disagrees. As thoroughly described in the Appeal Brief dated January 20, 2010, calculating delta velocity is a very straight forward calculation, whereby one skilled in the art may apply the basic equation for estimating delta velocity ( $v_f = v_o + at$ , where  $v_f$  is the final velocity,  $v_o$  is the initial velocity,  $a$  is the acceleration, and  $t$  is the time (as shown in Exhibits 1 and 2 submitted with the Appeal Brief of January 20, 2010)). The delta velocity may thereafter be compared with a lookup table or database to determine the vehicle damage (see page 4, lines 7-10 of Appellant's application as filed). Appellant submits that lookup tables or databases are simple tools that have been used for years by those skilled in many different arts. As understood by one skilled in the art, the lookup table is a column of delta velocities (including, in some cases, vehicle identification) having an estimated damage value correlated therewith. The damage values may be obtained from the insurance industry, be constructed from impact tests, etc. (see page 4, lines 14-17 of Appellant's application as filed). It is submitted that *how* the damage value is determined is irrelevant to the method defined in Appellant's claims, and thus the damage value may be determined via any method known or understood by one skilled in the art.

**c. State of the Prior Art**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, in the Answer dated April 13, 2010, the Examiner, at great length, questions how the lookup table is constructed (e.g., how the damage values in the table are determined, how the damage value is correlated to the delta velocity, etc.). Appellant submits, however, that the Examiner is again making the lookup table far more complicated than it needs to be for purposes of Appellant's invention as defined in the pending claims. The questions regarding how and why certain variables are determined/included/etc. has really nothing to do with the method of estimating vehicle damage. This information is determined from an insurance company, from vehicle crash tests, etc., and the construction of the table would be completed prior to performing the steps of Appellant's claimed method.

The Examiner further questions Appellant's examples set forth on page 17 of the Appeal Brief dated January 20, 2010. For instance, the Examiner asserts that he is not aware of a table where inputting a Suburban running at 5 mph would yield a vehicle damage estimate of 1. Appellant submits, however, that the foregoing example is just that; *an example*. It was included in the Appeal Brief as merely an illustration of how a lookup table may be constructed and applied. It is further submitted that the variables of the example (i.e., the Suburban running at 5 mph having a damage estimate 1) were set forth for purposes of creating this illustration, and that such variables may not (although they could) be found in a table that currently exists.

The Examiner also states that impact tests use a large number of variables and sensors to measure vehicle damage, and thus the estimation of vehicle damage (which Appellant assumes the Examiner meant when he referred to "the tests") would not have to be performed at all. Appellant respectfully submits that the Examiner is clearly misunderstanding what a lookup table is, at least because the lookup tables include the damage estimate which is determined from the impact tests. One performing the method defined in Appellant's claims 1 and 2 would use the lookup table to retrieve the damage estimate based at least on the delta velocity.

Additionally, the Examiner asserts that Appellant's example set forth on page 17 of the Appeal Brief would render claims 3, 4, 6, and 7 as inoperable because these claims appear to require a monetary estimation of vehicle damage. Appellant respectfully disagrees, and submits

that claims 3, 4, 6, and 7 have nothing to do with a monetary estimation of vehicle damage. Rather, these claims are directed to whether or not an insurance inspection is required. Thus, Appellant does not see how the example set forth on page 17 of the Appeal Brief renders claims 3, 4, 6, and 7 inoperable.

**d. Level of Ordinary Skill**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

**e. Level of Predictability in the Art**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

**f. Amount of Direction Provided by the Inventor**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010, as well as the arguments set forth hereinabove.

Further, the Examiner again argues that a lookup table, such as the one that Appellant is referring to in his specification, does not exist, and that the lookup table is not provided in Appellant's specification. Appellant again submits that a lookup table is simple and has been used for many years. As one example, a restaurant service tipping card is often used by patrons to determine the amount (in dollars) to tip the wait staff based on the amount (in dollars) of the food bill taking into account the standard percentages of tipping (e.g., 15%, 18%, 20%, etc.). It is submitted that this simple table is analogous to the lookup table that the Appellant would use to determine the vehicle damage estimate, except that velocity would be associated with a damage estimate.

**g. Existence of Working Examples**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, the Examiner asserts that the example provided at page 4, lines 15-17 (i.e., that a small delta velocity corresponds to limited vehicle damage and a progressively larger delta velocity corresponds to progressively more vehicle damage) of Appellant's specification may be incorrect. Appellant submits, however, that the foregoing example is just *an example*, and that other examples may also apply. Since limitations from the specification should not be imported into the claims (MPEP § 2111.01(II)), it is submitted that Appellant's pending claims are not limited to the example set forth above, and that other examples may also apply (such as the one suggested by the Examiner on page 31 in the Answer).

**h. Quantity of Experimentation Needed to Make or Use the Invention Based on the Content of the Disclosure**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

In consideration of all of Appellant's arguments set forth above and in the Appeal Brief dated January 20, 2010, Appellant submits that the Examiner still has *not* established that Appellant's application lacks enablement with regard to Appellant's pending claims. As such, it is still submitted that the 35 U.S.C. § 112, first paragraph, rejection of claims 1, 2, and 5 is erroneously based, and withdrawal of the rejection is still respectfully requested.

**C. Rejection of claims 1, 2, and 5 under 35 U.S.C. § 112, second paragraph**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, despite the simplicity or the complexity of the estimating of the vehicle damage, the Examiner argues that Appellant's specification does not disclose how the estimation is arrived at. Appellant disagrees with the Examiner, and submits that the estimation is accomplished *using the lookup table*. Details for how the lookup table is constructed may be inferred from Appellant's description that delta velocity and vehicle identification are used as inputs, and the damage value is used as the output. The delta velocity and the vehicle

identification may be looked up in the table to obtain the damage value (thus no calculations are involved in actually using the lookup table).

**D. Rejection of claim 1 under 35 U.S.C. § 103(a) over Mackey and Lockwood**

Appellant reiterates all of the arguments set forth in the Appeal Brief dated January 20, 2010.

Further, in the Answer dated April 13, 2010, the Examiner cites several portions of the Lockwood reference, and asserts that these portions establish that information is collected from vehicle sensors at service providers via a communications link. The Examiner further states that the collected information is used to generate and execute response plans (citing column 6, lines 41-61 of Lockwood).

Appellant submits, however, that the Examiner is misreading the Lockwood reference. It is submitted that the service provider that receives the collected information is *not* the control center that receives the communication from the customer indicating the occurrence of a distress event. Rather, the service provider that uses the collected information to generate and execute the response plans is the back end customer service environment, which utilizes application servers to generate and execute the response plans (column 6, lines 56-62).

The Examiner further cites several portions of the Lockwood reference, and submits that such portions indicate that the Lockwood method can make an assessment as to the estimated value of the damage done to a vehicle (see, e.g., column 8, line 64 through column 9, line 65). Appellant disagrees with the Examiner, and submits that the sensor data provides information pertaining to *what* is damaged (e.g., the front end of the vehicle, the rear quarter panel, etc.). In some instances, the sensor data may provide information indicating that the entire vehicle is damaged (which is referred to as a total loss (e.g., column 9, line 7)). Appellant submits that this disclosure does *not* teach or suggest that a damage estimate is *estimated* from the vehicle sensor data.

For all of the reasons stated above, as well as in the Appeal Brief dated January 20, 2010, Appellant still submits that the combination of Mackey and Lockwood *fails* to disclose all of the elements of claim 1, and thus *fails* to render claim 1 obvious.

**E. Rejection of claims 2-4 under 35 U.S.C. § 103(a) over Mackey, Lockwood, Madill, and Applicant Admitted Prior Art**

Appellant reiterates herein all of the arguments set forth in the Appeal Brief dated January 20, 2010.

**F. Rejection of claim 5 under 35 U.S.C. § 103(a) over Mackey and Lockwood**

Appellant reiterates herein all of the arguments set forth in the Appeal Brief dated January 20, 2010.

**G. Rejection of claims 6 and 7 under 35 U.S.C. § 103(a) over Mackey, Lockwood, and Madill**

Appellant reiterates herein all of the arguments set forth in the Appeal Brief dated January 20, 2010.

#### IV. CONCLUSION

The Appellant respectfully submits that claims 1-7 as currently pending fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. Accordingly, Appellant respectfully requests that the Board of Patent Appeals and Interferences find for the Appellant and reverse the rejection of each of Appellant's claims 1-4 under U.S.C. § 101; claims 1, 2, and 5 under 35 U.S.C. § 112, first paragraph; claims 1, 2, and 5 under 35 U.S.C. § 112, second paragraph; claim 1 under 35 U.S.C. § 103(a) over Mackey and Lockwood; claims 2-4 under 35 U.S.C. § 103(a) over Mackey, Lockwood, Madill, and Applicant Admitted Prior Art; claim 5 under 35 U.S.C. § 103(a) over Mackey and Lockwood; and claims 6 and 7 under 35 U.S.C. § 103(a) over Mackey, Lockwood, and Madill. In view of the foregoing, favorable consideration and passage to issue of the present application is respectfully requested.

Respectfully submitted,

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